Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (previously presented) An isolated *MEN1* gene, wherein said *MEN1* gene encodes a protein having the amino acid sequence of SEQ ID NO:2.

2. (cancelled)

3. (currently amended) An ~~The~~ isolated ~~*MEN1* gene of claim 1,~~ nucleic acid comprising ~~wherein the *MEN1 gene* comprises~~ SEQ ID NO:1.

4. (previously presented) The isolated *MEN1* gene of claim 1, wherein the *MEN1* gene comprises SEQ ID NO:3.

5.-23. (cancelled)

24. (currently amended) A kit for detecting in a test sample the presence or absence of a mutation in a *MEN1* gene having the sequence of SEQ ID NO:3, the kit comprising;

~~a) a container holding~~ an oligonucleotide sequence that ~~binds~~ hybridizes to a target region in exon 2, 3, 4, 5, 6, 7, 8, 9, and/or 10 of SEQ ID NO:3; and

~~b) a container holding~~ a reagent for detecting the formation of a duplex between the gene and the oligonucleotide ~~first nucleo~~tide sequence.

25. (cancelled)

26. (currently amended) The kit of claim 24, further comprising amplification primer pairs specifically ~~binding~~ hybridizing to a human *MEN1* gene, SEQ ID NO:3 ~~having the sequence of SEQ ID NO:3~~.

27.-29. (cancelled)

30. (currently amended) An ~~transfected~~ isolated cell ~~*in vitro*, wherein~~ the cell ~~comprises a~~ comprising the nucleic acid of claim 1.

31. (cancelled)

32. (currently amended) The ~~transfected~~ isolated cell of claim 30, wherein the nucleic acid comprises ~~a nucleic acid as set forth in SEQ ID NO:1 or~~ SEQ ID NO:3.

33. (currently amended) The isolated ~~transfected~~ cell of claim 30, wherein the cell is a human cell.

34.-35. (cancelled)

36. (currently amended) An expression cassette comprising ~~a~~ the nucleic acid of claim 1, wherein the nucleic acid is operably linked to a promoter.

37. (original) The expression cassette of claim 36, further comprising an expression vector.

38.-42. (cancelled)

43. (currently amended) A method for detecting the presence or absence of a mutation in a target region in exon 2, 3, 4, 5, 6, 7, 8, 9, and/or 10 of SEQ ID NO:3 in a nucleic acid sample, the method comprising:

a) contacting the nucleic acid sample with an oligonucleotide probe to the target region in exon 2, 3, 4, 5, 6, 7, 8, 9, and/or 10 of SEQ ID NO:3; and,

b) detecting the formation of a duplex between the ~~gene~~ target region and the oligonucleotide; wherein a change in the formation of the duplex in comparison to formation of a control duplex comprising the oligonucleotide and the wildtype target region of SEQ ID NO:3 is indicative of the presence of the mutation.

44. (cancelled)

45. (currently amended) A method for detecting the presence or absence of a mutation in a target region in exon 2, 3, 4, 5, 6, 7, 8, 9, and/or 10 of SEQ ID NO:3 in a nucleic acid sample, the method comprising:

incubating the nucleic acid sample in an amplification reaction comprising primers that amplify the target region in exon 2, 3, 4, 5, 6, 7, 8, 9, and/or 10 of SEQ ID NO:3;

contacting the amplified product with an oligonucleotide probe to the amplified target region of SEQ ID NO:3; and,

detecting the formation of a duplex between the amplified product and the oligonucleotide probe; wherein a change in the formation of the duplex in comparison to formation of a control duplex comprising the oligonucleotide and the wildtype target region of SEQ ID NO:3 is indicative of the presence of the mutation.

46. (cancelled)

47. (currently amended) A method for detecting the presence or absence of a mutation in a target region in exon 2, 3, 4, 5, 6, 7, 8, 9, and/or 10 of SEQ ID NO:3 in a nucleic acid sample, the method comprising:

incubating the nucleic acid sample from the individual in an amplification reaction comprising primers that amplify a target region of SEQ ID NO:3; and

determining the sequence of the target region.

48. (new) An isolated cell comprising the nucleic acid of claim 3.

49. (new) The isolated cell of claim 48, wherein the cell is a human cell.

50. (new) An expression cassette comprising the nucleic acid of claim 3, wherein the nucleic acid is operably linked to a promoter.

51. (new) The expression cassette of claim 50, further comprising an expression vector.